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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,216	02/26/2002	Akihiro Imai	2002_0280A	2606

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EXAMINER

YAO, SAMCHUAN CUA

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/082,216	Applicant(s) IMAI ET AL.	
	Examiner Sam Chuan C. Yao	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2002.
- 2a) ☐ This action is FINAL.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/16/02 6/20/02</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4, 16-18 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 16 are indefinite, because it is unclear where the recited aromatic rings come from. Are the recited aromatic rings derived from component (A) and/or component B or in addition to components (A) and (B)? In view that the limitations in these claims are not understood, no attempt was made to make an art rejection. No prior art rejection has been made since it would be improper to rely on speculative assumptions as to the meaning of the claims in this application. A lack of a prior art rejection should not be construed as meaning that the claims would be patentable if corrected to overcome the 35 USC 112 rejection set forth above.

Claim 17 is indefinite, because it is unclear how the recited process steps in this claim further limit the adhesive composition recited in claim 1. Moreover, it is also unclear which portion of the recited limitation is a body of this claim.

Claim 18 is indefinite, because it is unclear whether this claim positively require laminating films using an adhesive recited in claim 1.

Claim 21 is indefinite, because it is unclear how the recited adhesive composition in claim 1 is used for making a laminated film. Is it use for coating a laminated film, or

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use as a primer. Would this claim also read on a film which is coated with an adhesive composition in claim 1. Moreover, it is also unclear which portion of the limitation is the body of the claim.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 5-10, 13-15, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Helmeke et al (US 5,869,593).

With respect to claims 1 and 6, Helmeke et al discloses a moisture curing hot-melting polyurethane adhesive composition, the adhesive composition comprises (A) a polyol component, and (B) a polyisocyanate component, wherein the polyol component comprises a polyether polyol and a crystalline polyester polyol having a melting point of 40-120 °C, wherein an amount of the crystalline polyester polyol is preferably about 20-40% wt of the composition (abstract; col. 2 line 66 to col. 3 line 17; col. 4 line 16; col. 4 lines 3-67; col. 5 lines 10-67).

With respect to claim 5, see column 4 lines 58-65.

With respect to claims 7-10, see column 5 lines 25-56.

With respect to claims 13-15, see column 7 lines 5-18, lines 60-64.

With respect to claim 21, see column 9 lines 22-42.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-3 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helmeke et al (US 5,869,593) as applied to claim 1 above.

With respect to claims 2-3, Helmeke et al teaches a resultant adhesive composition having a low viscosity, the viscosity is preferably less than 200 Poise or 20 Pa \*s) at a temperature of 110 °C. Although not explicitly disclosed, in view of the similarity of the adhesive compositions between the recited adhesive and the adhesive of Helmeke, the viscosity of a resultant adhesive must overlap or fall within the recited adhesive composition viscosity at conditions recited in the claims. It should be pointed out that, the viscosity recited in these claims, because the components did not have sufficient time to fully react (i.e. viscosity measurement is made immediately after being blended together) and because reaction rate between components is generally lower at temperature of 70 °C than at a temperature of 110 °C. In any event, it would have been obvious in the art to form an adhesive composition taught by Helmeke et al, since as noted above, it is desired to form a low viscosity adhesive and a viscosity of less than 200 Poise at a temperature of 110 °C.

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With respect to claims 17-20, since it is conventional in the art to laminate a plurality of films using a hot-melting polyurethane adhesive; and since the recited film material is conventional in the art; and since the recited film laminating speed is old in the art, these claims would have been obvious in the art.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Helmeke et al (US 5,869,593) as applied to claim 7 above, and further in view of Kube (US 6,191,212).

Since Kube, directed to a moisture curable hot-melt adhesive, teaches using various polyisocyanates which are similar to the one taught by Helmeke et al and also teaches using hexamethylene diisocyanate, the limitation in this claim would have been obvious in the art making an adhesive composition taught by Helmeke et al.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Helmeke et al (US 5,869,593) as applied to claim 1 above, and further in view of Werner et al (US 5,166,302).

Helmeke et al teaches using polyether polyol having a number average molecular weight of 1000-4000 g/mole (col. 4 lines 3-23) and also see column 4 lines 58-67.

Werner et al, drawn to making a moisture curing hot-melt adhesive, teaches the desirability of using a crystalline polyester polyols preferably having a molecular weight of 2000-5000, For this reason, the limitation recited in this claim would have been obvious in the art.

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**Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sam Chuan C. Yao  
Primary Examiner  
Art Unit 1733

Scy  
03-18-04